## REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

#### I. CLAIM STATUS AND AMENDMENTS

Claims 113-122 were pending in this application when last examined.

Claims 117-122 were examined on the merits and stand rejected.

Claims 113-116 were withdrawn as non-elected subject matter. These claims are amended to require all the limitations of the claims under examination. Therefore, rejoinder is respectfully requested upon allowance of the claims under examination.

Claims 113-119 are amended.

Support for the "homology of 95% or more" in part (b) of claims 113 and 117 can be found in paragraph [0131] of the specification as filed.

Support for the definition of "stringent condition" in claims 115 and 117 can be found in paragraph [0135] of the specification as filed.

No new matter has been added.

#### II. FOREIGN PRIORITY

The Examiner is respectfully requested to fully acknowledge the claim for foreign priority by checking boxes 12(a)(1, 2, or 3) on the coversheet of the next response. Enclosed is a copy of Form PCT/IB/304 indicating that the certified priority document was submitted to the PTO by the International Bureau (Attachment A).

## III. INFORMATION DISCLOSURE STATEMENT

Applicants respectfully request consideration of JP 11-322781 designated "AE" which was not considered in the Notice of References Cited by Applicant and Considered by the Examiner. Applicants note that the relevancy of this reference is given in the International Search Report filed with the Information Disclosure Statement of May 18, 2008. Enclosed is a copy of the Form PTO-1449 for the Examiner's convenience (Attachment B).

## IV. INDEFINITENESS REJECTIONS

On pages 2-3, claims 117 and 120 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

Claims 117 and 120 are amended to recite the definition of "stringent condition". Therefore, this rejection is overcome as applied to amended claims 117 and 120 for reasons which are self-evident.

#### V. WRITTEN DESCRIPTION/ENABLEMENT REJECTION

On pages 3-5, claims 117 and 120 were rejected under 35 U.S.C. § 112, first paragraph, on the basis that the specification lacks written description support for a protein, including deletion, substitution or addition of one or several amino acid residues and interacts with a c-Jun protein, which is considered to be a broad genus of amino acid sequences.

Claims 117 and 120 are amended to limit the scope to amino acid sequences showing a homology of 95% or more to any one of the specified sequences of SEQ ID NOS: 120 and 121 in order to expedite prosecution and without acquiescence to the Examiner's position.

In view of the high homology, i.e., structural similarity, a person of skill in the art can reasonably recognize that the present inventors had possession of the claimed invention. Therefore, this rejection is overcome.

## VI. OBVIOUSNESS REJECTION

On pages 5-6, claims 117-122 were rejected under 35 U.S.C. § 103(a) as obvious over Lopez-Egido et al. in view of accession number K01347. Applicants respectfully traverse this rejection as applied to the amended claims.

The Office asserts that Lopez-Egido et al. teach methods for detecting an interaction between glial fibrillary acidic protein (GFAP) and menin, and that it would have been obvious to use SEQ ID NO: 250 or 120 for the nucleotide sequence encoding GFAP or the amino acid sequence of GFAP.

Applicants note that Lopez-Egido et al. discloses that menin associates with JunD and that menin interacts with GFAP and vimentin (See Abstract, pg. 175), which may suggest the interaction between JunD and GFAP via menin. However, JunD is different from c-Jun.

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Therefore, the interaction between c-Jun and GFAP is not expected from Lopez-Egido et al. which is silent about c-Jun.

The accession number K01347 only discloses the sequence of GFAP. This accession number fails to teach JunD and c-Jun are equivalent. The accession number K01347 cannot remedy the basic inadequacy of Lopez-Egido et al. to make the claimed invention obvious.

For the above-noted reasons, this rejection is untenable and should be withdrawn.

## **CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

Etsuko MIYAMOTO et al.

William R. Schmidt, II Registration No. 58,327

Attorney for Applicants

WRS/lc Washington, D.C. 20006-1021 Telephone (202) 721-8200 Facsimile (202) 721-8250 January 16, 2009

## **ATTACHMENTS**

- A. Form PCT/IB/304
- B. Form PTO-1449 from IDS of May 18, 2006

# PCT

NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

KAWAGUCHI, Yoshiyuki Higashi Nihonbashi Acropolis 21 Building 6th floor, 4-10, 3-chome, Chuo-ku, Tokyo 1030004 JAPON

IMPORTANT NOTIFICATION

From the INTERNATIONAL BUREAU

International application No. PCT/JP04/017306

P595-C4285

Date of mailing (day/month/year)

Applicant's or agent's file reference

International filing date (day/month/year) 19 November 2004 (19.11.2004)

International publication date (day/month/year)

09 February 2005 (09.02.2005)

Priority date (day/month/year) 19 November 2003 (19.11.2003)

Applicant

KEIO UNIVERSITY et al

- 1. By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an" asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- 2. (If applicable) The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- 3. (If applicable) An asterisk (\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b) (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)). Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as the priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

Priority date Priority application No. Country or regional Office Date of receipt or PCT receiving Office of priority document

19 November 2003 (19.11.2003)

2003-389676

JP

20 January 2005 (20.01.2005)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

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ATTACHMENT G

Attachment A

Sheet 1 of 1 INFORMATION DISCLOSURE STATEMENT APPROACH PETIPTO 18 MAY 200										
FORM PTO 1449 (m		ATTY DOCKET NO. SERIAL NEW			IAL NO.	• • • • •	579802			
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				APPLICANT						
LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)				Etsuko MIYAMOTO et al.						
← Date Submitted to PTO: May 18, 2006				FILING DATE May 18, 2006			GI	GROUP		
U.S. PATENT DOCUMENTS										
✓ •EXAMINER INITIAL		DOCUMENT NUMBER	DATE		NAME CLASS		s	UBCLASS	FILING DATE IF APPROPRIATE	
	AA	2002/0176987	11/2002	Yad	lav et al.				Corresponds to AD	
	АВ	6,228,994	5/2001	Yana	gawa et al.				Corresponds to AE	
	AC									
FOREIGN PATENT DOCUMENTS										
		DOCUMENT NUMBER	DATE	C	DUNTRY	CLASS		UBCLASS	TRANSLATION YES NO	
	AD	02/48347	6/2002	<u></u>	wo				Abstract	
	AE	11-322781	11/1999		JP				х	
	AF									
	AG									
	АН									
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)										
	Al K. Horisawa et al., "In vitro selection of Jun-associated proteins using mRNA display", Nucleic Acids Research, Vol. 32, No. 21, pp. 1-10, 2004.									
	AJ	E. Miyamoto-Sato et al., "Highly stable and efficient mRNA templates for mRNA-protein fusions and C-terminally labeled proteins", Nucleic Acids Research, Vol. 31, No. 15, pp. 1-9, 2003.								
	AK	T. Ito et al., "Identification of SWI-SNF Complex Subunit BAF60a as a Determinant of the Transactivation Potential of Fos/Jun Dimers", The Journal of Biological Chemistry, Vol. 276, No. 4, pp. 2852-2857, January 26, 2001.								
	AL	Y. Chinenov et al., "Close encounters of many kinds: Fos-Jun interaction that mediate transcription regulatory specificity", Oncogene, Vol. 20, pp. 2438-2452, 2001.								
	АМ	N. Nemoto et al., "In vitro virus: Bonding of mRNA bearing puromycin at the 3'-terminal end to the C-terminal end of its encoded protein on the ribosome in vitro", FEBS Letters, Vol. 414, pp. 405-408, 1997.								
	AN	R. W. Roberts et al., "RNA-peptide fusions for the <i>in vitr</i> o selection of peptides and proteins", Proc. Natl. Acad. Sci., Vol. 94, pp. 12297-12302, November 1997.								
EXAMINER		<u> </u>	<u>-</u> -	DATE CONSIDERED						

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy this form with next communication to applicant.